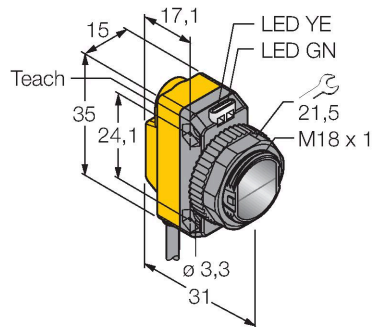


QS18VN6XLP

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter for Clear Object Detection



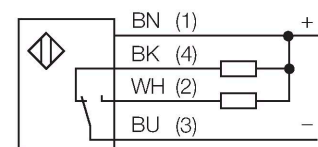
Technical data

Type	QS18VN6XLP
ID no.	3801264
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized (coaxial)
Wavelength	625 nm
Range	0...3000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Current output	100 mA
Readiness delay	≤ 100 ms
Response time typical	< 0.4 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm ²

Features

- Cable, PVC, 2 m, 4-wire
- Protection class IP67
- LED, all-round visible
- Coaxial optics
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



Functional principle

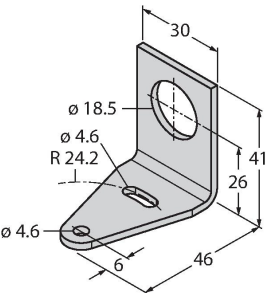
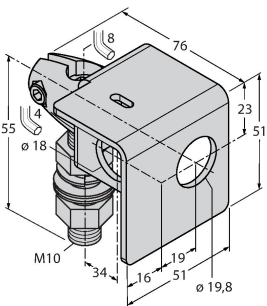
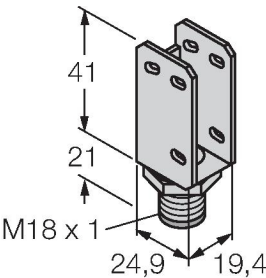
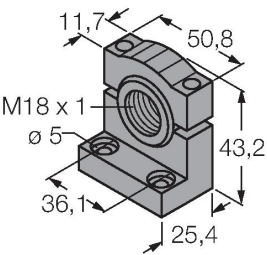
Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. This device is sensitive enough to detect clear film, glass bottles and other transparent objects. The blind zone is reduced through the coaxial optics. The built-in polarizing filter also provides for the detection of high-gloss objects. With the help of three different limit values it is possible it can react to objects that differ in their transparency. The devices are self-regulating to reduce influences by dirt and dust.

Excess gain curve
Excess gain in relation to the distance (LP-type)

Technical data

Ambient temperature	-40...+70 °C
Protection class	IP67
Special features	Clear object detection keep/defer
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus

Accessories

SMB18A 	3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	SMB18AFAM10 	3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
SMBQS18A 	3069721 Mounting bracket, stainless steel, for 18 mm thread	SMB18SF 	3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable